

Appin. No. 10/643,661

Attorney Docket No. DKT01053

I. Listing of Claims

1 through 14. (Cancel).

15. (Currently Amended): A synchronizer for facilitating engagement of rotatable members comprising, in combination,

a first rotatable member having axially extending engageable teeth,

a second rotatable member disposed adjacent said first rotatable member and having axially extending engageable teeth,

a clutch collar spring biased toward said second member, having teeth engaging said engageable teeth on said first member and disposed for axial motion therealong, said axial motion achieving engagement of said teeth with said engageable teeth on said second member,

a bi-directionally translatable shift fork engaging said collar,

a plurality of permanent magnets coupled to said second member for rotation therewith, and

an induction member disposed adjacent said permanent magnets and coupled to said clutch collar for rotation therewith.

16. (Previously Presented): The synchronizer for facilitating engagement of rotatable members of claim 15 further including a transfer case having primary and secondary outputs and wherein said first rotatable member is coupled to said secondary output and said second rotatable member is coupled to said primary output.

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17. (Previously Presented): The synchronizer for facilitating engagement of rotatable members of claim 15 wherein said plurality of permanent magnets are arranged end to end and coupled to said second rotatable member.

18. (Previously Presented): The synchronizer for facilitating engagement of rotatable members of claim 15 wherein said clutch collar is spring biased toward said second member.

19. (Cancel).

20. (Previously Presented): The synchronizer for facilitating engagement of rotatable members of claim 15 wherein said second rotatable member is splined to a primary output shaft.

21. (Previously Presented): A synchronizer and clutch for achieving engagement of rotatable members comprising, in combination,

a first rotatable member disposed on an axis and having teeth,

a second rotatable member disposed on said axis adjacent said first rotatable member and having teeth,

a spring biased clutch collar engaging and driven by said teeth on said first member and disposed for motion along said axis and engagement with said teeth on said second rotatable member,

a bi-directionally translatable shift fork,

at least one permanent magnet coupled to said second rotatable member for rotation therewith, and

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an induction member disposed adjacent said permanent magnet and operably coupled to said first rotatable member for rotation therewith.

22. (Previously Presented): The synchronizer and clutch for achieving engagement of rotatable members of claim 15 further including a transfer case having primary and secondary outputs and wherein said first rotatable member is coupled to said secondary output and said second rotatable member is coupled to said primary output.

23. (Previously Presented): The synchronizer and clutch for achieving engagement of rotatable members of claim 15 having a plurality of permanent magnets arranged end to end and coupled to said second rotatable member.

24. (Previously Presented): The synchronizer and clutch for achieving engagement of rotatable members of claim 15 further including a compression spring for biasing said clutch collar toward said second member.

25. (Cancel).